UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.	
09/470,234	12/22/1999	DAVID L. SALGADO	D/99173 5920	
27074 OLIFF & BER	7590 12/20/2007 RIDGE, PLC.	EXAMINER		
P.O. BOX 3208	350	HYEON, HAE M		
ALEXANDRIA, VA 22320-4850			ART UNIT	PAPER NUMBER
			2839	
				····
			NOTIFICATION DATE	DELIVERY MODE
			12/20/2007	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27074@oliff.com jarmstrong@oliff.com

		Application	ı No.	Applicant(s)			
Office Action Summary		09/470,234	,	SALGADO ET AL.			
		Examiner		Art Unit			
	;	Hae M. Hye	on	2839			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THI 36(a). In no even will apply and will , cause the applic	S COMMUNICATION t, however, may a reply be tim expire SIX (6) MONTHS from to ation to become ABANDONED	l. ely filed the mailing date of this communication. O (35 U.S.C. § 133).			
Status		•					
1)⊠	Responsive to communication(s) filed on <u>02 November 2007</u> .						
,	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
5)□ 6)⊠	4) ☐ Claim(s) 1-3,5,6,8-10 and 21-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-3,5,6,8-10 and 21-26 is/are rejected.  7) ☐ Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>22 December 1999</u> is/al Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	re: a)□ acc drawing(s) be tion is required	held in abeyance. See d if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119							
12) <u>□</u> a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  See the attached detailed Office action for a list	s have been s have been rity documer u (PCT Rule	received. received in Application ts have been received 17.2(a)).	on No ed in this National Stage			
Attachme							
Attachmen	n(s) ce of References Cited (PTO-892)		4) Interview Summary	(PTO-413)			
2) Notice 3) Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date		Paper No(s)/Mail Da 5) Notice of Informal Pa	ite			

#### **DETAILED ACTION**

#### Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the signal detector** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 2839

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 2, 5, 6, 8-10 and 21-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The independent claims 1, 2 and 10 recite "a signal detector for detecting signals communicated through the transmission line." However, the present specification does not disclose the signal detector and the drawings do not show the signal detector. According to the present specification, the sensor is the element that detects the signal. However, the claims do not recite any structural relationship to define the sensor to be the signal detector. Previously, the examiner understood the signal detector to be the sensor. But, the amended claims clearly recite the sensor and the signal detector to be two different elements. Thus, it is not clear whether the sensor is the signal detector or whether they are two different distinct elements.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

09/470,234

Art Unit: 2839

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bass, Sr. et al (US 5,222,164).

Bass, Sr. discloses an apparatus comprising a receptacle 30 for receiving a connector 12; and a sensor 34, 36 in the receptacle 30 associated with the receptacle 30 for detecting the presence of the connector 12 within the receptacle 30, wherein the sensor 34, 36 comprises a light emitting device 36 and a light sensor 34; wherein when the connector 12 is not present within the receptacle, the light sensor receives the light emitted from the light emitter device 36 and when the connector 12 is present within the receptacle 30, the connector 12 blocks light passages between the light emitting device 36 and the light sensor 34. However, Bass, Sr. does not use a mirror to reflect the light emitted by the light emitting device 36.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the apparatus taught by Bass, Sr. such that the receptacle includes a mirror as taught by the instant invention because the use of mirror for reflecting light is well known and common knowledge. Whether the light emitted by the light emitting device 36 is reflected to the light sensor 34 or is shone directly to the light sensor 34, the function of the apparatus of Bass, Sr. would not be affected or changed.

# Response to Arguments

6. Applicant's arguments with respect to claims 1-3, 5, 6, 8-10 and 21-26 have been considered but are most in view of the new ground(s) of rejection.

09/470,234 Art Unit: 2839

#### Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 4,925,402 by Inaba et al., US Patent No. 7,090,531 B2 by Simmel and US Patent Application Publication No. 2006/0234564 A1 by Pharn et al.
- 8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae Moon Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:

09/470,234 Art Unit: 2839 Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hae Moon Hyeon Primary Examiner Art Unit 2839

hmh hmh

Hae Moon Hyeon